PBR 1000L

Modifications from PBR 1000L manual Rev 1.92

Updated July 14/2017

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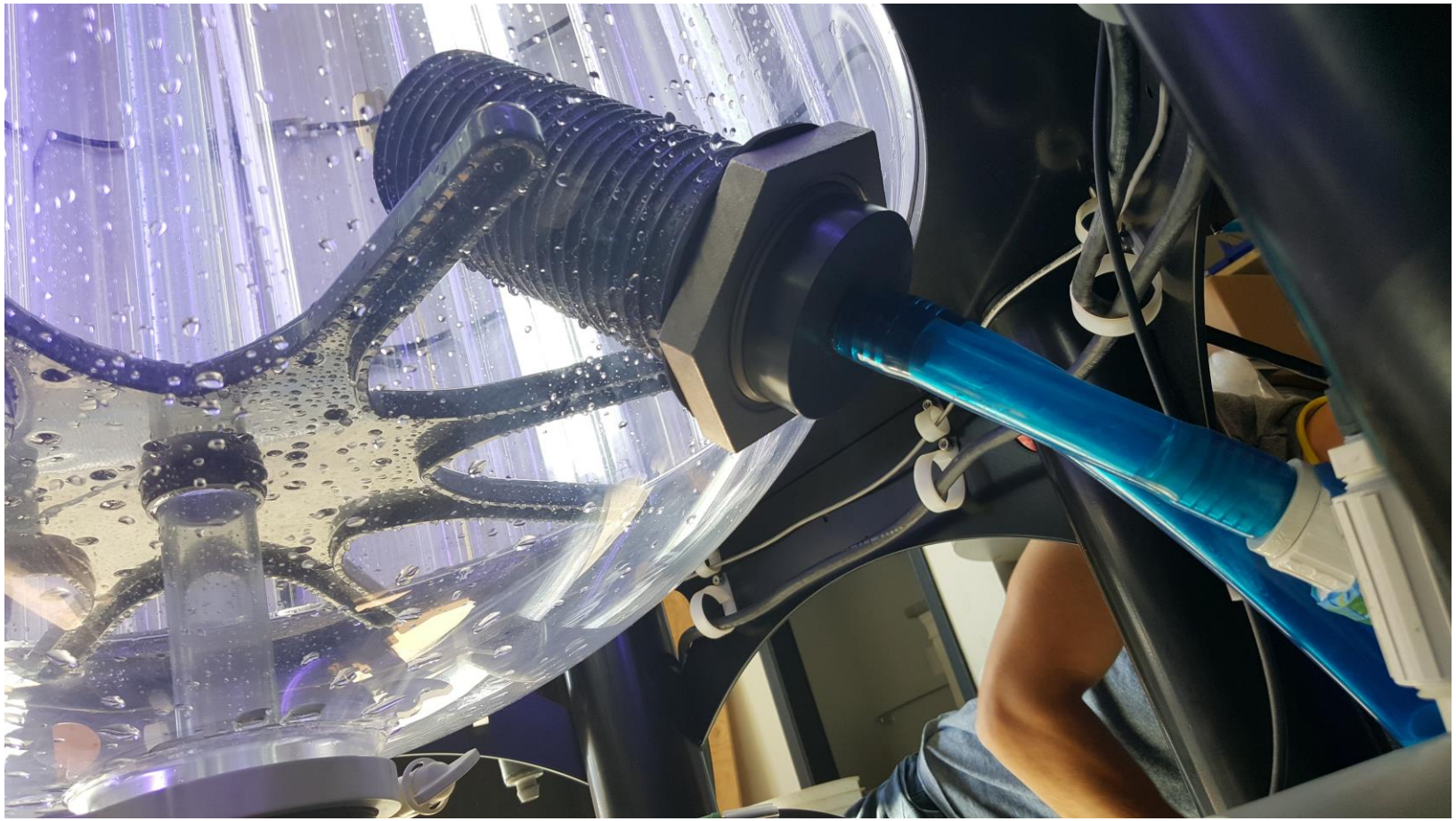
New Feature: Air bleed

By putting this through the side of the tank this also allows for continuous culturing through using it as an overflow-harvest

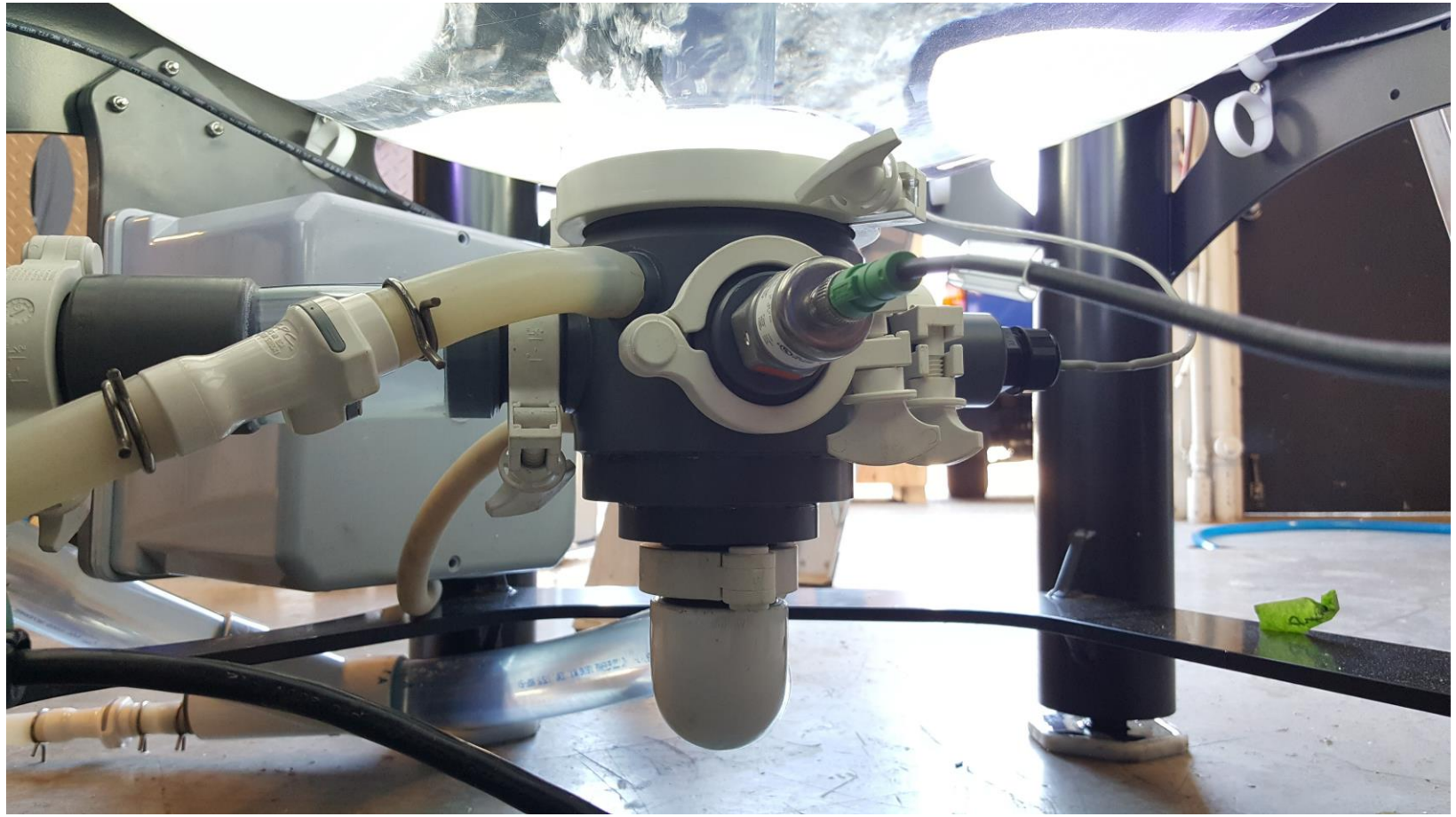
Allows the pressure sensor to read more repeatable and dependably

New Feature: High polish Bubble plate & bigger heat exchanger

Much better aeration with much less settling

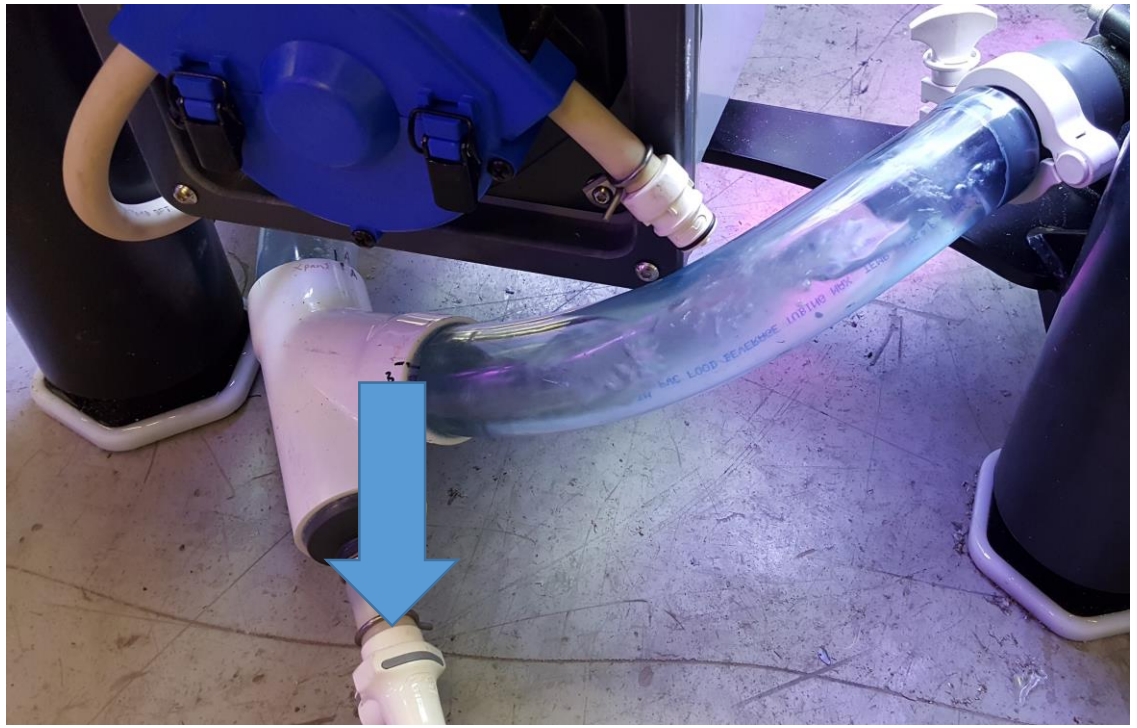


Removable manifold & dedicated bubble plate air supply

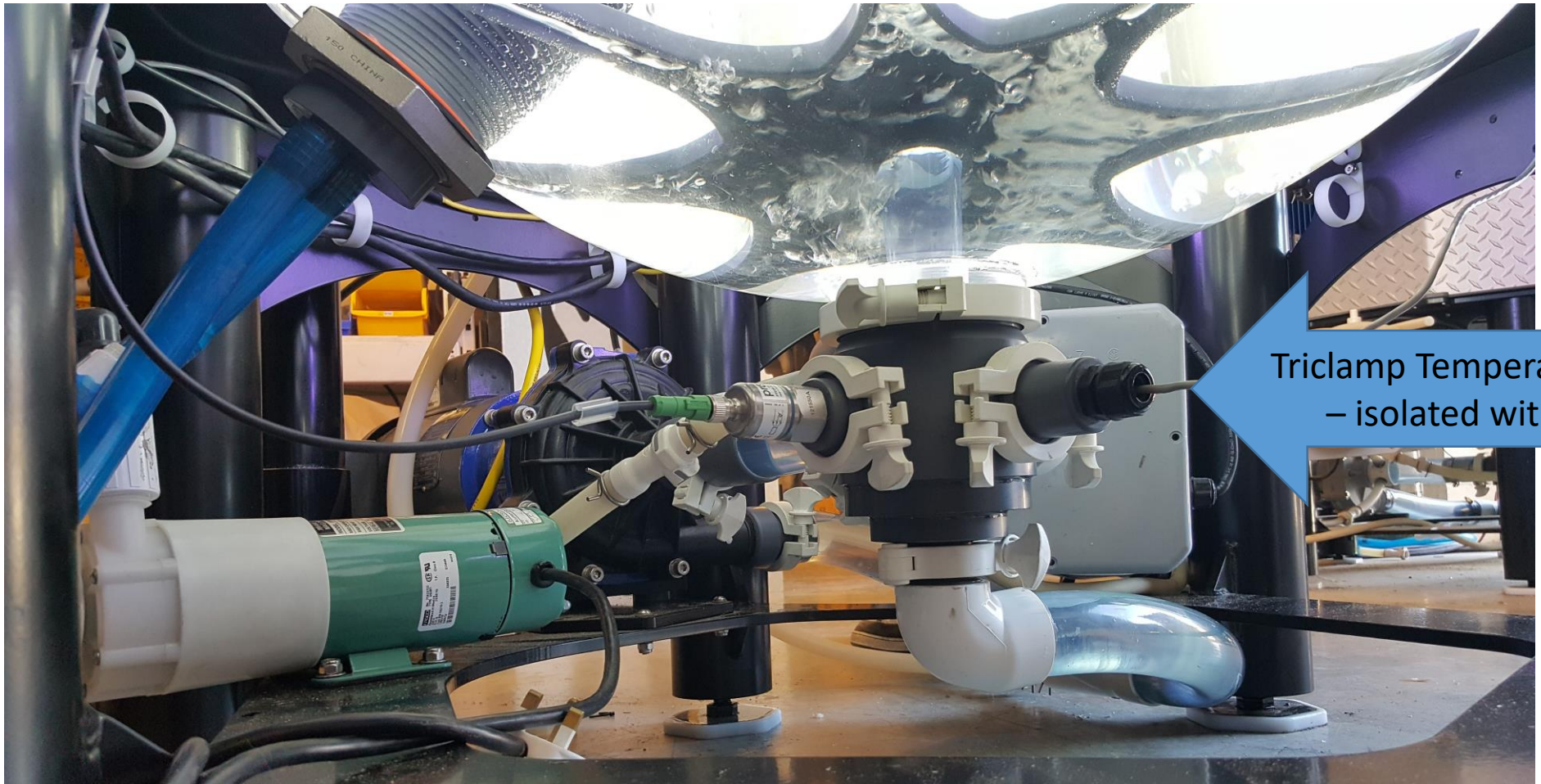


No more Drain valve

- ½” QDC is sterilisable and higher flow than previous drain valve- Please note the PVC fittings are not autoclavable

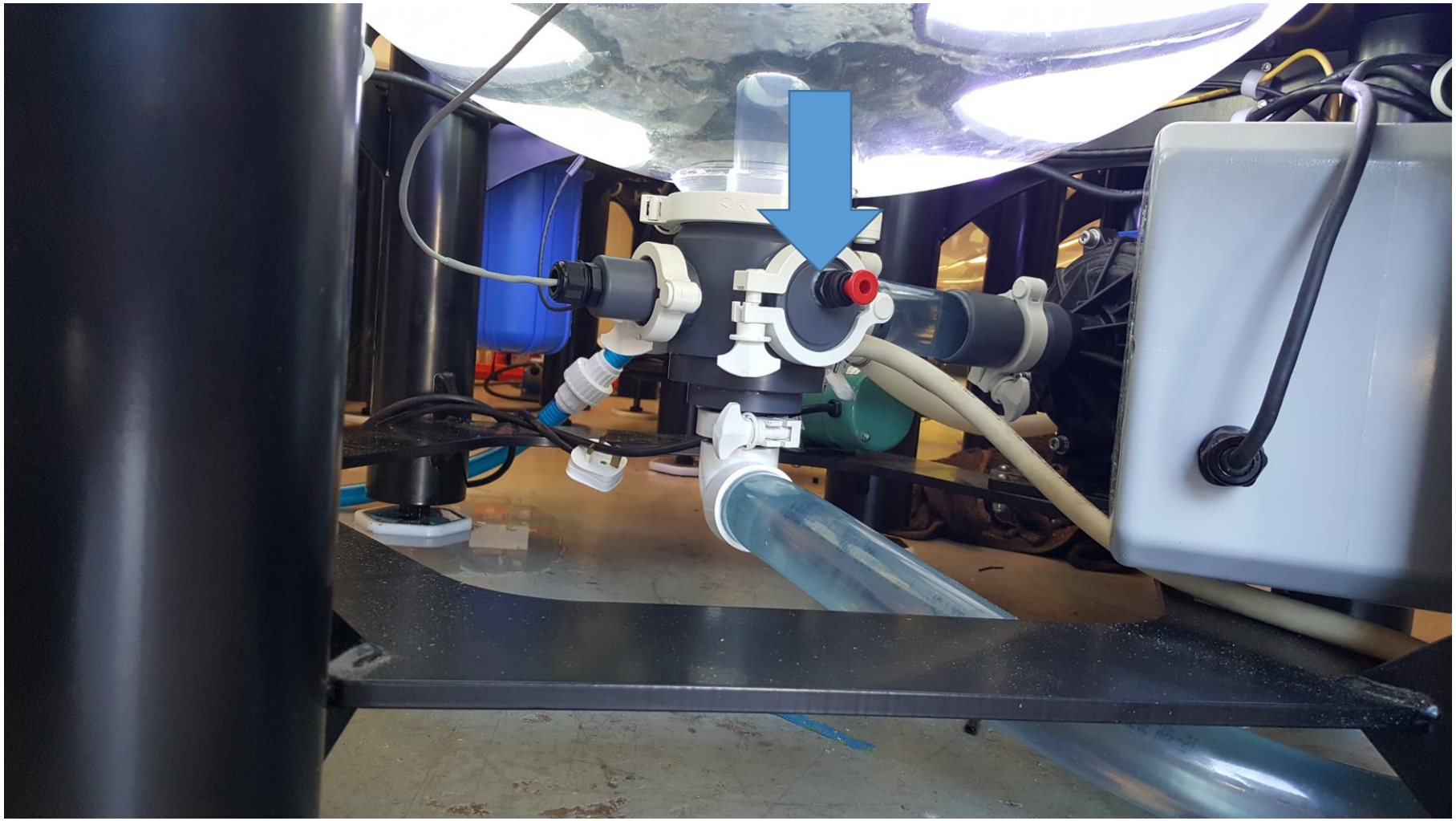


New Feature: Removable Temperature probe



Add remote probe from chiller here

New Feature:removable pH probe adapter plate

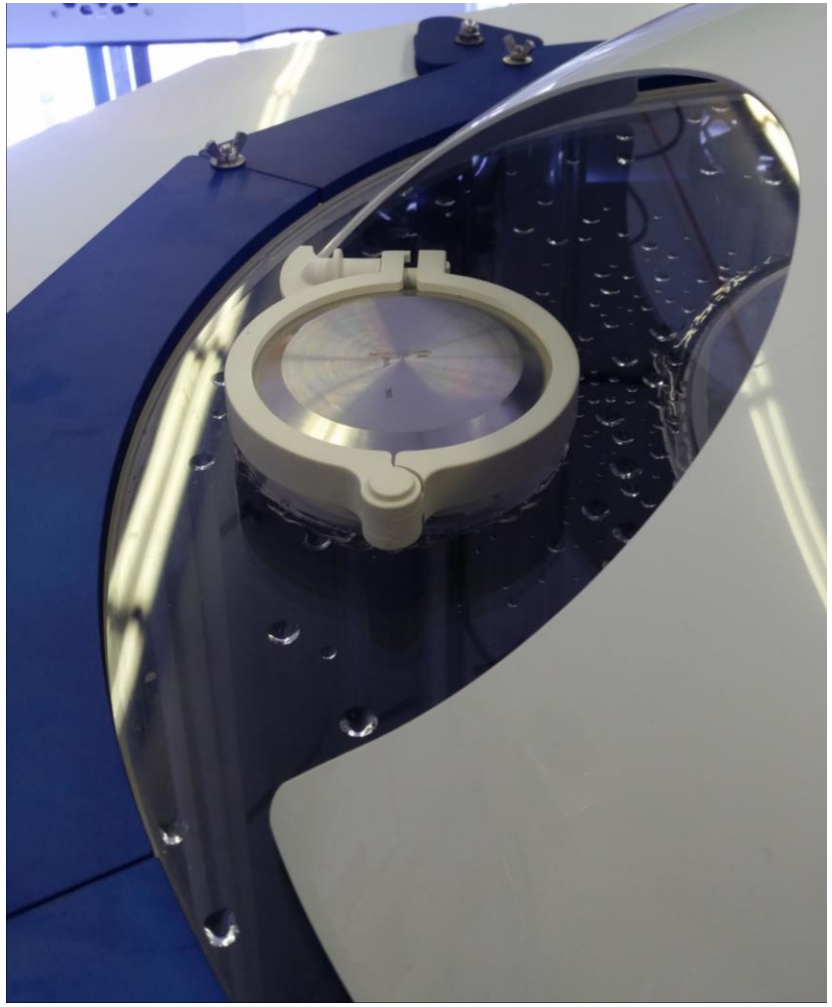


Bigger/faster harvest pump ~7l/min up to 60’ head

Please note this QDC should be Female on your PBR

New Feature: larger chemical addition port

Allows you to spray into the tank (for whatever reason) without removing the lid and top clamps



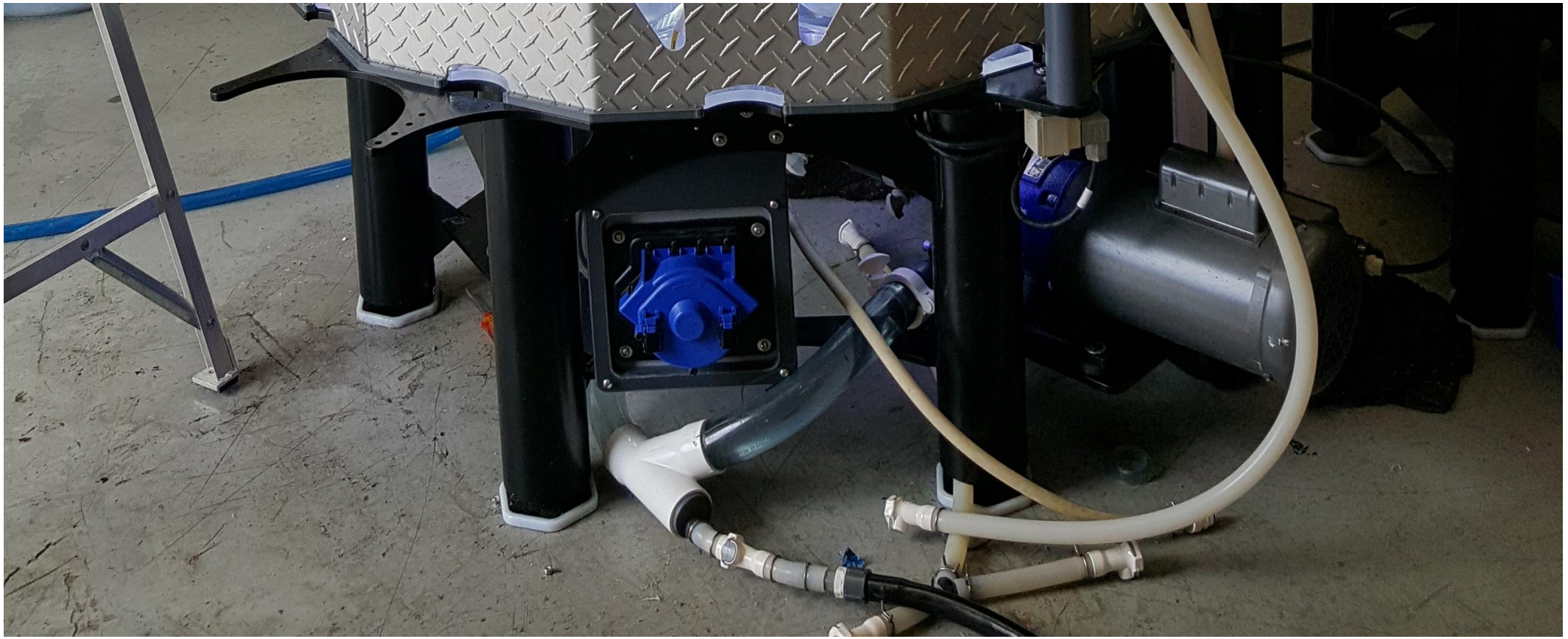
NF: extra lights/new spectra

- There are 30 T5s now
- This brings the light intensity up to ~700 µ Einstein's m^{-2} Sec^{-1} in the tines with 3 lights in them at the surface of the acrylic
  - enough to cause photoinhibition in non-acclimated species
- The new spectra is 1/3 of each:
  - Aquapink (Geisman)
  - midday (Geisman)
  - 6400K

New Feature: Bigger air pump 60L/M and quantitative flow valve

New Feature: Aluminum Light shells/no crown

New Feature: Powder-coated Metal base



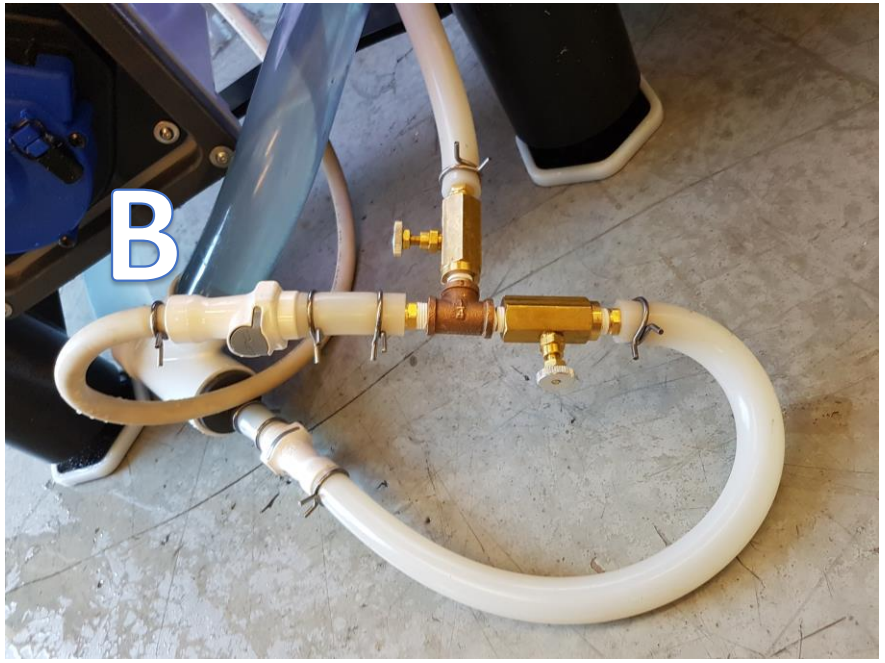
NF: Air distribution

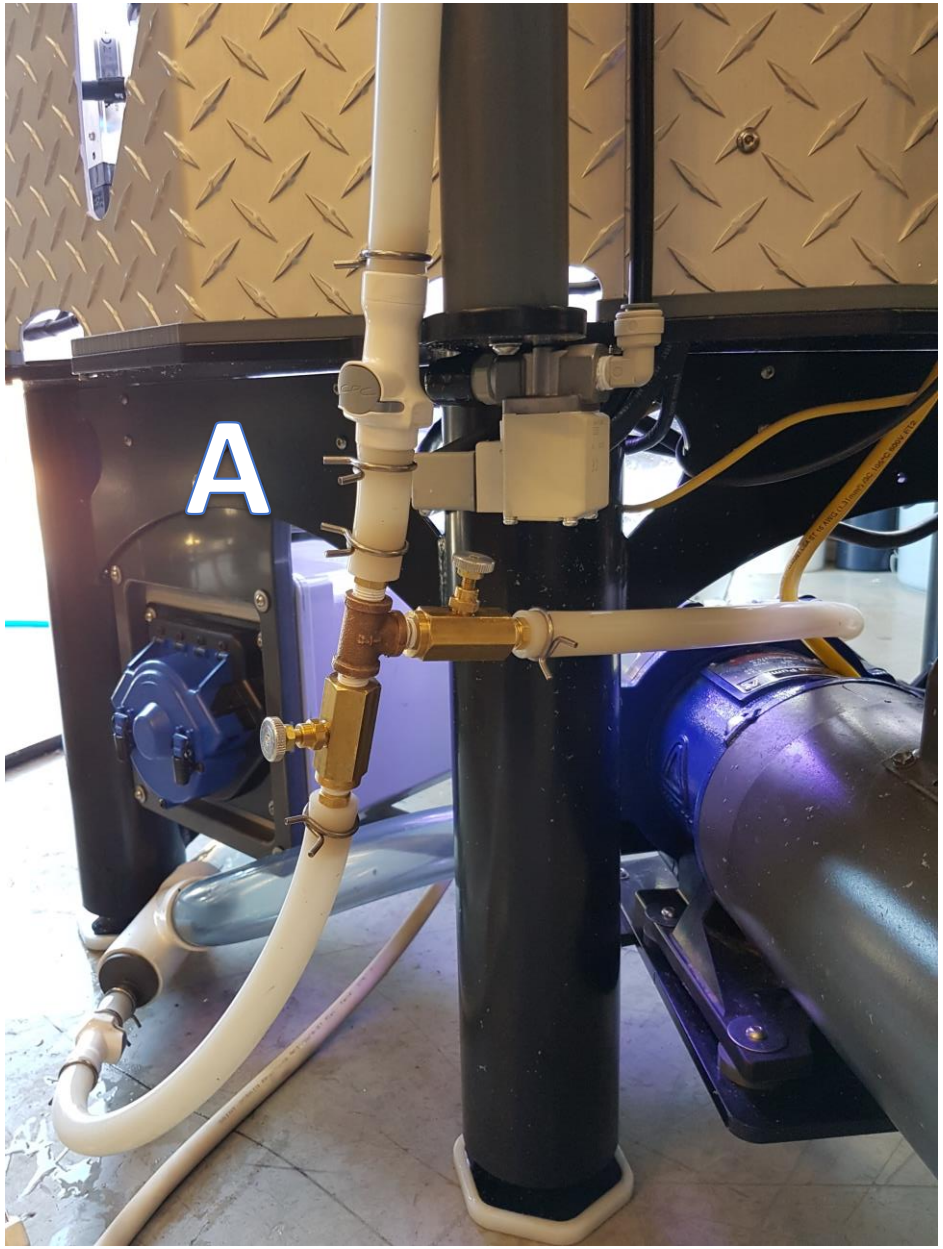
- Allows independent control of air flow to bubble plate and lower plumbing
- Ensure to keep flow in the lower plumbing to avoid dead zones
- New QDC above the tee to allow sterilization of the air lines in place

Culturing set up for air tubes

Cleaning Set up

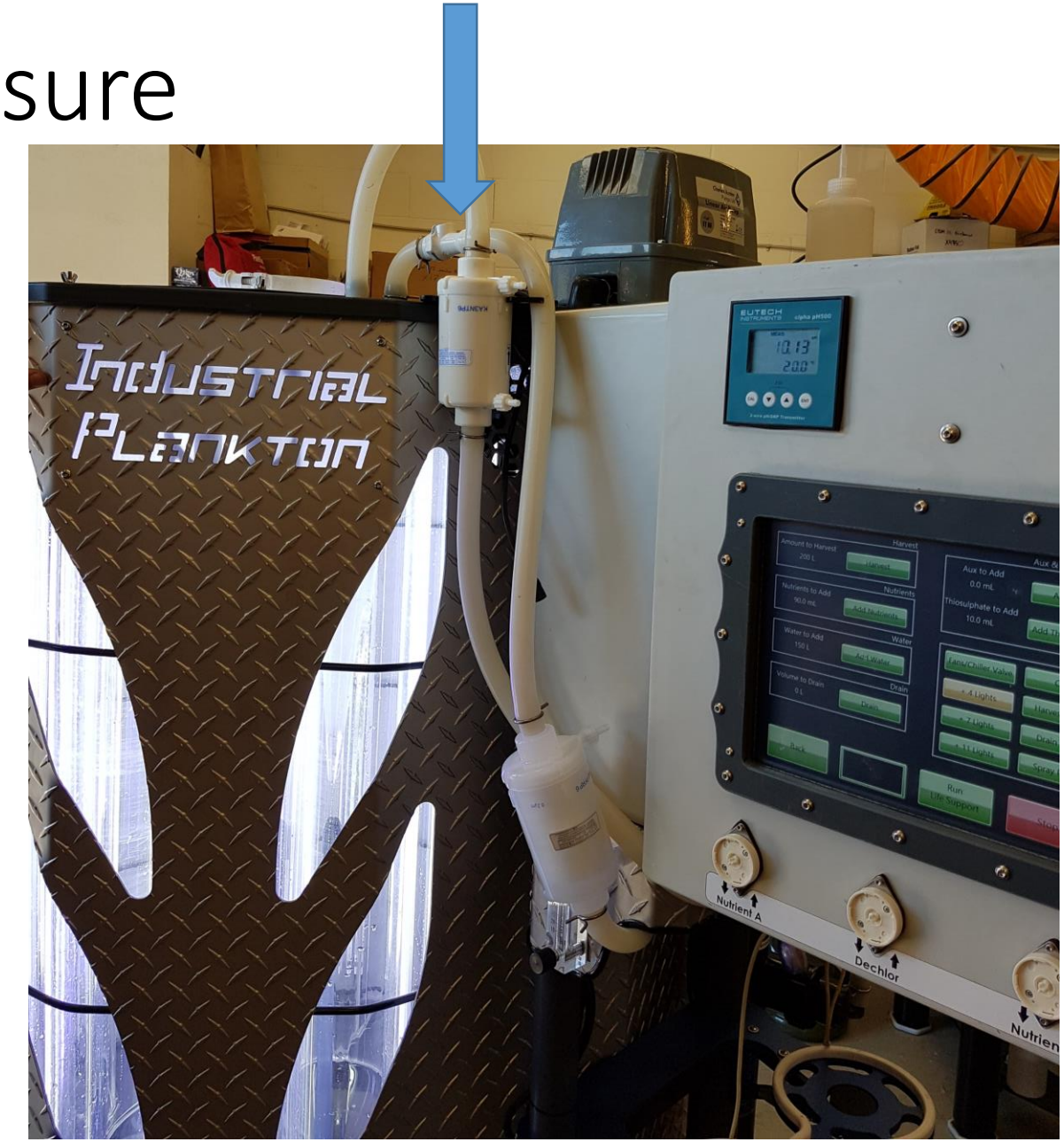
- Disconnect QDC A and connect it to the harvest line's Female QDC Labelled B
- Run spray Pump





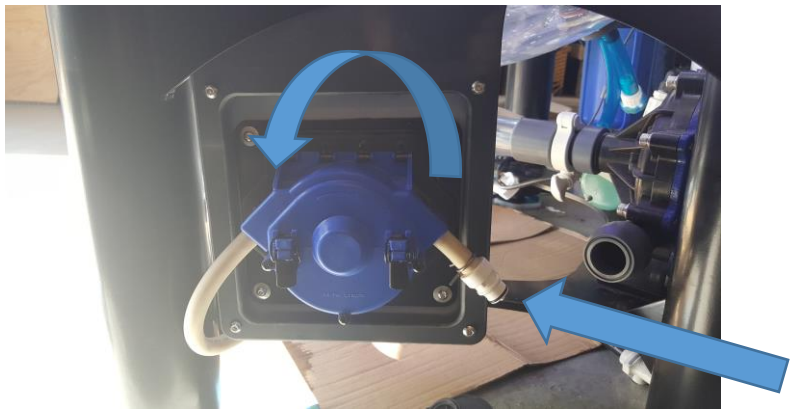
Cleaning positive pressure

Take air filter out from nutrient bottle plate and connect to the QDC in the top of the tank beside the water inlet



Biosecure Inoculation

- with Male QDCs on your inoculant carboys you can inoculate through the harvest pump in reverse rotation
- To inoculate through the harvest pump flip up the trigger switch on the right hand side of the control box



Please note this QDC should be Female on your PBR

Through-tine OD sensor

- Limits fouling
- Has been aligned
- Needs to be calibrated *in situ*